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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Andre L. Marais
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 Wilshire Boulevard, Seventh Floor
Los Angeles, CA 90025-1026

EXAMINER	
STRANGE, AARON N	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/945,445	MOIR, IAN	
	Examiner	Art Unit	
	Aaron Strange	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 01292003, 04172002, 01092002
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Item number 113, as disclosed on Page 7, Line 8 of the present application, is not present in the drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19,20,44,45 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 19 recites the limitation "the network management traffic" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is unclear what Applicant intends this limitation to be.

5. Claim 19 recites the limitation "the network management policy" in line 3. There is insufficient antecedent basis for this limitation in the claim. It appears that Applicant may have intended to refer to "the network traffic management policy" recited in claim 1, and it has been interpreted as such.

6. With regard to claim 20, the limitation "the network traffic" is unclear. It is unclear if Applicant intends to refer to the "network management traffic" recited in line 2 of claim 19 or the "network traffic" recited in lines 4-5 of claim 1. It appears that Applicant intends to refer to the "network management traffic" recited in claim 19, and it has been interpreted as such.

7. Claims 44 and 45 contain similar recitations to those of claims 19 and 20, and the above rejection fully applies to those claims.

8. Claim 52 recites the limitation "The machine-readable medium" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1,2,6-9,12,14-18,21-25,26,27,31-34,39-43, and 46-52 are rejected under 35 U.S.C. 102(e) as being anticipated by McGloghrie et al. (US 6,286,052).

11. With regard to claim 1, McGloghrie discloses a method to implement policy-based network traffic management, the method including: receiving first data pertaining to a network device at a network traffic manager (Policy enforcer receives APD messages (Col 10, Lines 62-65), containing parameters regarding device (Col 5, Lines 3-9), the first data being received out-of-band of network traffic (dedicated connection for APD messages)(Col 10, Lines 62-65); extracting second data from the network traffic (source/destination IP)(Col 16, Lines 25-33); and implementing a network traffic management policy at the network traffic manager utilizing the first and second data (policy is enforced)(Col 16, Lines 38-40).

12. With regard to claim 2, McGloghrie further discloses that the first data is associated with the network traffic by being communicated to the network traffic manager out-of-band during a keep-alive session pertaining to the network traffic (Col 12, Lines 25-29).

13. With regard to claim 6, McGloghrie further discloses that the first data comprises data concerning network access requirements of the network device (anticipated traffic flow) (Col 7, Lines 38-51).

14. With regard to claim 7, McGloghrie further discloses that the network access requirements are of an application executing on the network device (application program specifies the anticipated traffic flows)(Col 7, Lines 38-51).

15. With regard to claim 8, McGloghrie further discloses that the first data is received from a client application executing on the network device (flow declaration component) (Col 7, Lines 38-51).

16. With regard to claim 9, McGloghrie further discloses that the first data includes an information profile concerning the network device (device and application parameters) (Col 5, Lines 3-8).

17. With regard to claim 12, McGloghrie further discloses that the first data is communicated on a periodic basis from the network device (Changes is parameters are sent periodically) (Col 18, Lines 26-41) as part of a keep-alive protocol (APD messages are part of keep-alive protocol) (Col 17, Lines 13-22).

18. With regard to claim 14, McGloghrie further discloses that the second data extracted from the network traffic is identified by a classification rule accessed by the network traffic manager (Col 16, Lines 25-33).

19. With regard to claim 15, McGloghrie further discloses that the second data is extracted from any one of a group of network traffic types including a packet, a cell and a frame (Col 16, Lines 25-27).

20. With regard to claim 16, McGloghrie further discloses that the classification rule is received at the network traffic manager from a network administrator (Col 15, Line 62 to Col 16, Line 5).

21. With regard to claim 17, McGloghrie further discloses receiving third data pertaining to a physical characteristic of a network connection device at which the network traffic is received, and implementing the network traffic management policy utilizing the third data (Source port) (Col 16, Lines 27-30).

22. With regard to claim 18, McGloghrie further discloses that the physical characteristic includes a port of the network connection device on which the network traffic is received (Source port) (Col 16, Lines 27-30).

23. With regard to claim 21, McGloghrie further discloses that the implementing of the network traffic management policy includes any one of routing, switching or bridging the network traffic (Policy enforcer is a bridge, switch, or router) (Col 6, Lines 43-58).

24. With regard to claim 22, McGloghrie further discloses that the implementing of the network traffic management policy includes classifying the network traffic according to at least one classification rule associated with the network management policy (Col 16, Lines 25-33).

25. With regard to claim 23, McGloghrie further discloses that the implementing of the network traffic manager policy includes forwarding the network traffic as one or more distinct flows (policy/service treatment is applied to flows)(Col 16, Lines 30-51).

26. With regard to claim 24, McGloghrie further discloses that the distinct flows are attributed varying QOS levels, and the QOS level attributed to each distinct flow is determined according to a classification of network traffic comprising each respective discrete flow (Discrete flows are identified and the service treatment is applied to them)(Col 16, Lines 25-40).

27. With regard to claim 25, McGloghrie further discloses communicating a message from the network traffic manager to an application executing on the network device from which the network traffic is received, the message including information regarding a policy decision made regarding network traffic received by the network traffic manager device (Feedback is provided by the policy enforcer)(Col 16, Lines 52-56).

28. Claims 26,27,31-34,39-43, and 46-50 are rejected for the same reasons as claims 1,2,6-9,12,14-18, and 21-25, as they recite substantially identical subject matter. Claims 51 and 52 are rejected for the same reasons as claim 1 since they recite substantially identical subject matter. Means for performing the method recited are inherent since the method is performed in the system disclosed by McGloghrie, and a machine-readable medium containing instructions to perform the method is also inherent since the method is performed on computers.

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

30. Claims 3-5,11,19-20,28-30,36, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGloghrie et al. (US 6,286,052) in view of Sistanizadeh et al. (US 6,681,232).

31. With regard to claims 3-5 and 28-30, while the system disclosed by McGloghrie shows substantial features of the claimed invention (discussed above), it fails to disclose that the first data comprises data concerning network access rights of a user of the network device or more specifically, a bandwidth allocation expressed in terms of a community membership.

Sistanizadeh teaches defining communities of users in terms of a service class (Gold, Silver, Bronze) (Col 22, Lines 5-42). Users from the Gold class receiver premium service such as guaranteed bandwidth, while users of the bronze class receive only best-effort service. The customer also has the ability to request assignment to another service class in order to improve service for a period of time (Col 22, Lines 15-30). This allows some flexibility in the handling the quality of service for different users without the overhead of customized service levels for each individual customer.

Therefore, it would have been obvious to one or ordinary skill in the art at the time the invention was made to define network access rights for a user in terms of a community membership which has a certain bandwidth allocation. This

allows flexibility in defining the class of service for a user while requiring significantly less overhead than custom service levels for each individual user.

32. With regard to claims 11 and 36, while the system disclosed by McGloghrie shows substantial features of the claimed invention (discussed above), it fails to disclose that the first data is retrieved from a registry within which data pertaining to multiple network devices is stored.

As discussed regarding claims 3-5, Sistanizadeh teaches defining communities of users in terms of a service class (Gold, Silver, Bronze) (Col 22, Lines 5-42). Sistanizadeh further discloses that the service level associations are stored in a registry (web server) separate from the client (Col 22, Lines 28-30). Storing the service levels in the registry ensures that the service level manager is informed of the changes and can appropriately update the customer's service level. Adding support for service levels would be advantageous for the reasons cited regarding claims 3-5.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to retrieve the first data from a registry within which data pertaining to multiple network devices is stored in order to provide service levels as discussed regarding claims 3-5. The use of the registry provides all of the service level associations to the service level manager for each of the clients in the network.

33. With regard to claims 19,20,44, and 45, while the system disclosed by McGloghrie shows substantial features of the claimed invention (discussed above), it fails to disclose receiving a time of day at which the network traffic is

received at the network connection device, and implementing the policy based on that time of day.

Sistanizadeh teaches basing the service policy on a time of day information received from the network device. Sistanizadeh discloses that a user may wish to have an upgraded class of service for a particular time period in order to download important data, and return to a lower class of service at a later time to save money (Col 22, Lines 15-42).

Therefore, it would have been obvious to one or ordinary skill in the art at the time the invention was made to use the time of day as a parameter when implementing a policy. This allows the user to request a higher or lower class of service in order to improve service or reduce costs.

34. Claims 10 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGloghrie et al. (US 6,286,052) in view of Kunzinger (US 6,011,777).

35. With regard to claims 10 and 35, while the system disclosed by McGloghrie shows substantial features of the claimed invention (discussed above), it fails to disclose that the first data includes network traffic conditions at the network device.

Kunzinger teaches the inclusion of congestion information in packets by the sender to indicate if congestion is present at that device (Col 5, Lines 44-54). This is particularly advantageous since networks are made up of segments, and congestion can differ from one segment to the next, so the congestion level is not

constant for all segments on a sender/receiver loop (Col 2, Lines 28-42). By indicating the congestion at the device, appropriate measures can be taken to reduce that congestion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include information about the network traffic conditions at the network device since they may differ from the network traffic conditions at the recipient. By notifying the recipient of the congestion at the device, changes could be made to the traffic management policy to alleviate the congestion.

36. Claims 13 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGloghrie et al. (US 6,286,052) in view of Extreme Networks.

37. With regard to claims 13 and 38, while the system disclosed by McGloghrie shows substantial features of the claimed invention (discussed above), it fails to disclose that the first data identifies a work group to which the network device belongs.

Extreme Networks teaches defining groups of users and defining QoS profiles that specify the level of service received by members of the group. Extreme Networks further discloses that a workgroup may be used as a traffic group to provide a consistent level of service to all members of the group. This would require identification of the work group to which a network device belongs in order to determine the service level for that device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to identify the work group of the network device in order to determine what class of service to give the device in a network using work groups as traffic groups as taught by Extreme Networks.

Conclusion

38. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 703-305-8878. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FRANTZ B. JEAN
PRIMARY EXAMINER